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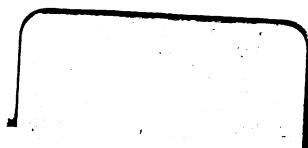


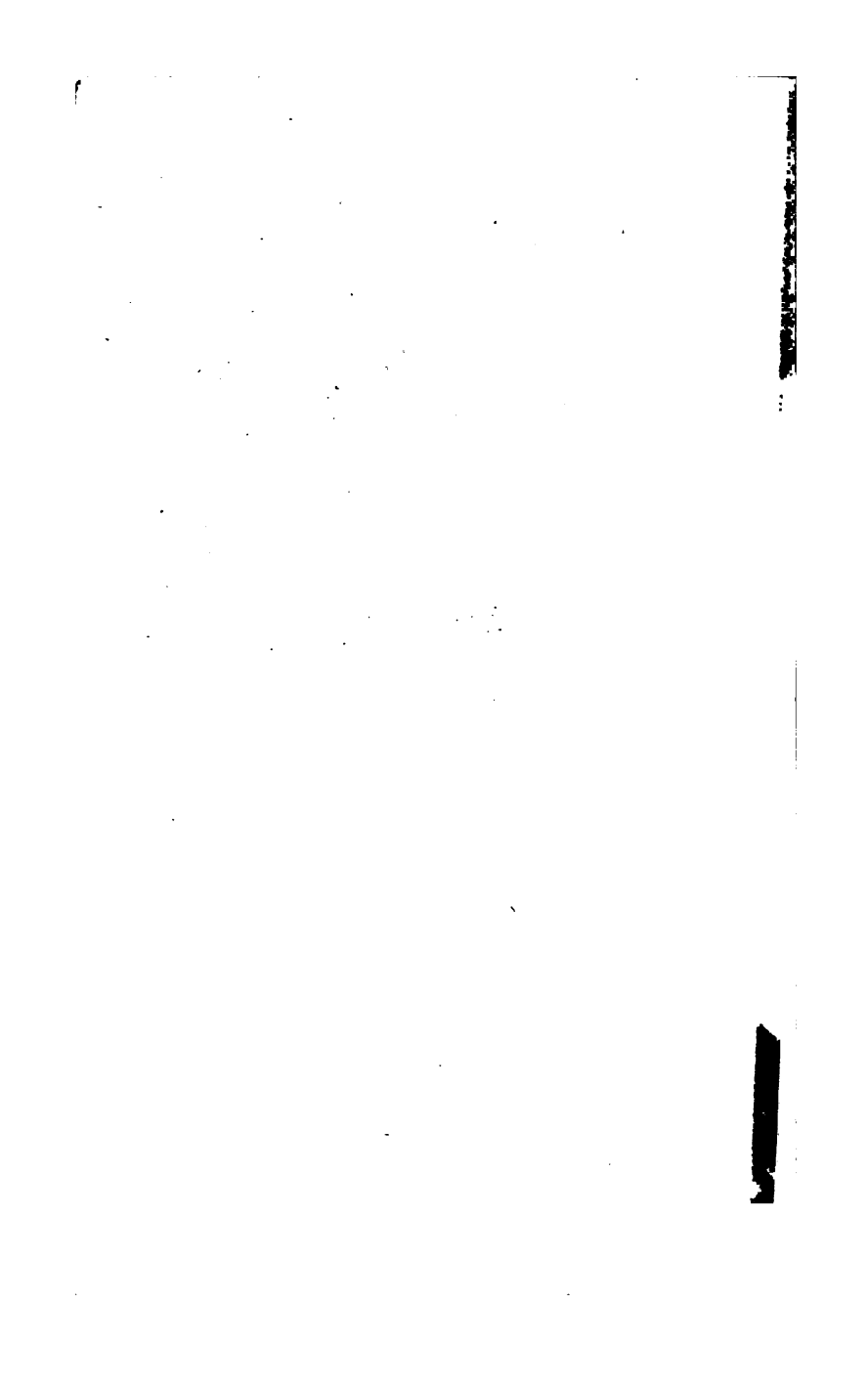


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ADVICE TO THE BILIOUS.

ADVICE TO THE BILIOUS;

OR,

Treatise on Disease of the Liver,

ITS CAUSES, ITS NATURE, AND ITS CURE.

BY ROWLAND EAST,

MEMBER OF FACULTY OF PHYSICIANS AND SURGEONS,
LICENTIATE OF APOTHECARIES' HALL, ETC.

DEDICATED,

BY SPECIAL PERMISSION,

TO H.R.H. THE DUKE OF SUSSEX.

London:

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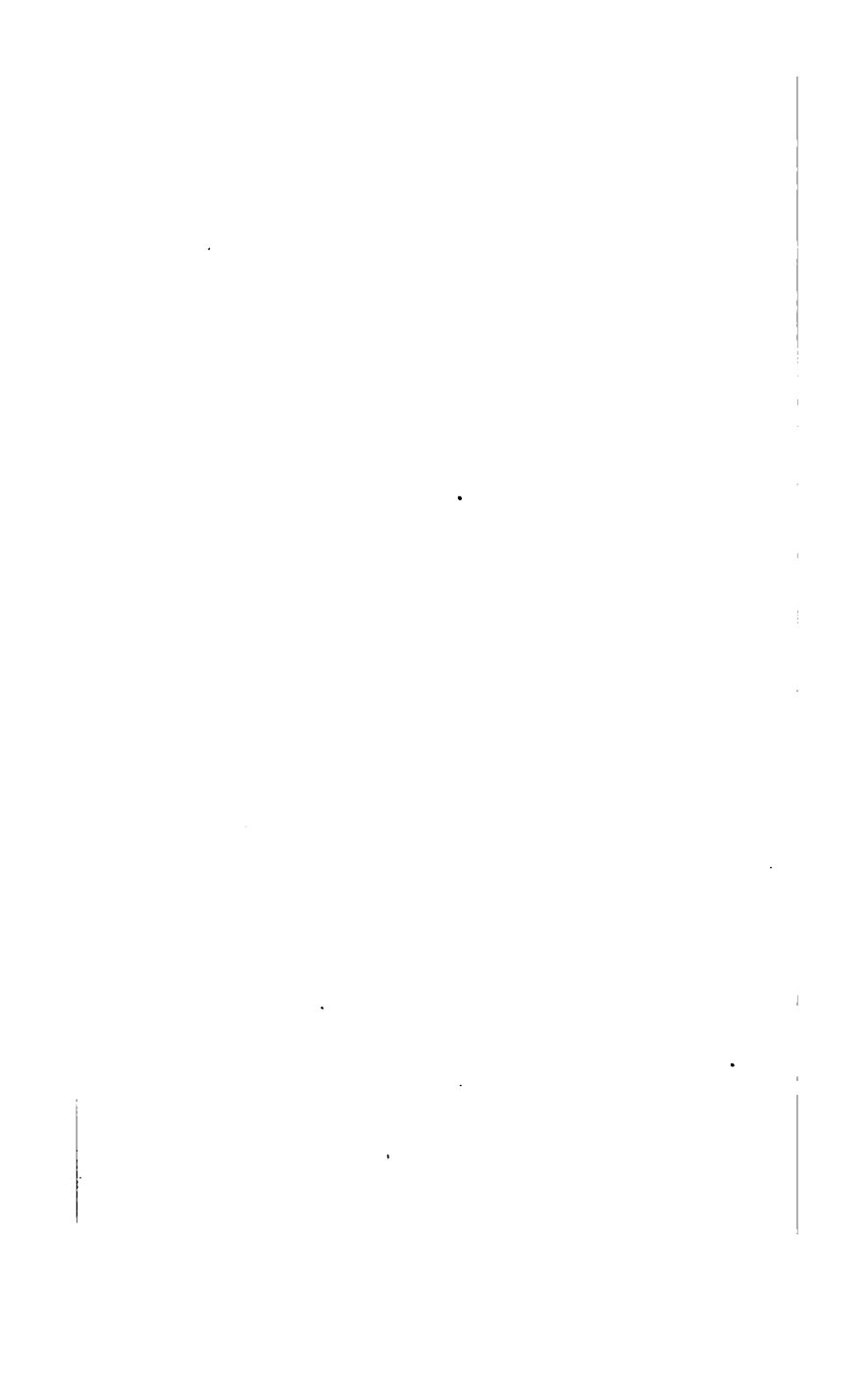
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TO
HIS ROYAL HIGHNESS THE DUKE OF SUSSEX,
THE PROMOTER OF KNOWLEDGE
IN ALL ITS BRANCHES,
THE VALUE OF WHOSE PATRONAGE
IS EQUALLED ONLY
BY THE KINDNESS WITH WHICH IT IS BESTOWED,
THIS UNPRETENDING VOLUME
IS
Dedicated
BY
HIS OBEDIENT SERVANT,
THE AUTHOR.



P R E F A C E.

THE object of this Work is to do good, by rendering familiar to the public the causes, nature, and treatment of a universal malady. The Author has found in the course of his practice a lamentable ignorance of medical subjects. Whilst the man of intelligence is not satisfied until he has attained a general knowledge of the varied arts and sciences, medical philosophy is overlooked; and, like the religion of the middle ages, left to its teachers.

The consequence of this ignorance is, that when a man is attacked by disease he is as unacquainted with the common principles by which it is subdued as the savage with the complex movements of the steam engine.

This ignorance is alike injurious to the public and the profession.

Disease is allowed to advance without a consciousness of its presence; remedies suggested by the skilful physician are neglected, because there is no apparent connexion between the means and the end. It is injurious to the practitioner, as the patient being ignorant of the principles on which he acts, cannot judge of his skill except by results.

The intelligent client can comprehend his advocate as he advances argument after argument, and can decide whether it has been the nature of his cause, or the character of the pleading which has led to the result. But the enlightened physician whilst this ignorance prevails cannot be thus judged, and hence the triumph of empiricism.

The man of science courts inquiry, the empiric dreads it. Could the enlightened physician, like the bee in the transparent hive, develop his principles and his practice, he would not conceal them from the spec-

tator. The empiric would shroud his work in darkness.

The object, then, of this treatise has been to illustrate Disease of the Liver: the Author in his progress through his work has alluded to what he considers popular evils; his only reason was because he thought it right.

The Work is small, that it may be presented to the public in a cheap form. He, like others before him, commends it to the public; to assert he is not anxious as to the result, would be untrue.

His opinions are sometimes novel, but as one of them is, that nothing is permanent but truth, he is willing to stand the test of time; to see a fabric falsely based, fall into ruins would be a pleasure, though the foundation were laid by himself; but to view a work founded on truth, though it were but as a simple stone by the way side, indicating the road to health, would be a gratification.

Finally, though all must be the subjects of DISEASE; though in all mankind there will

be a fatal termination; may no virulent epidemic, as an angel of death, stalk through the land; may no plague or pestilence smite either man or beast: and above all, though he would not deprive his countrymen of the "wine which cheereth god and man," may the vice of intemperance become a fact which may be merely heard of in history, and not in present existence, is the sincere wish and fervent prayer of the Author.

168, *Fleet Street, London,*
October 1, 1841.

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DEFINITION OF HEALTH.

INTRODUCTION.

WHAT is health? This is an important question, and demands a definite reply. Does health consist in freedom from pain? Certainly not; as organs may be diseased and functions deranged, whilst an individual may be totally unconscious of it. For example:—the lungs may be in the incipient state of consumption, and the patient may not know it. Is it freedom from actual disease? This is an unsatisfactory definition,—from the vast distinction between disease and derangement, organ and function. No *negative* definition of health can be philosophical, as it is a *positive* condition of the human frame; that state so desirable of attainment, where there is a perfect balance of the powers of life; where the circulatory, the respiratory, and digestive systems retain their equilibrium, indivi-

dually and combined, and where each system is in its full state of vigour. The statement, though strange, is true, that man may be diseased and not know it. The balance of the three great powers—circulation, respiration, and digestion—may appear to be sustained; but health does not consist in equilibrium alone. Each system must be up to its proper degree of power. There may be a perfect balance where the power of each system is morbidly augmented. Circulation, for instance, may be increased twenty-five per cent.; respiration—digestion may follow in the same ratio; and yet the violence of action, though there be a state of equilibrium, may be sufficient to destroy life in a few hours.

Again: the balance of powers may be sustained, whilst each individual action is in a sinking state.

How then shall health be defined? We will illustrate it by numerals. Suppose, for the sake of argument, we divide the condition of the human constitution into three states, health occupying the medium position. We will suppose, then, that when the balance of powers is perfect, and when each power attains that degree of force corresponding to Twelve, the constitution is in a state of health; if the force amounts to Fourteen, the system is in an inflammatory state; if depressed to Nine, it is in a condition of debility.

To fix a standard of power for all mankind is impossible. It is not muscular power, because the

highest degree of it is associated with disease. There is something in the human constitution indefinable, call it what you may, essentially distinct from muscular force. It is that preservative principle which keeps up the vigour and maintains the balance of the rest; through atmospheric changes, pestilential vapours, vicious excesses, it sustains the human fabric up to the number Twelve. Like the limbs of the polypus, it increases its force in the same ratio in which it is needed, until a certain period, when its productive power is paralyzed, and is sometimes entirely defunct.

The human constitution may average, in the individual power of respiration, circulation, and digestion, the number Twelve; the balances of those powers may be sustained; but unless there be a due proportion of the preservative principle, to which we have alluded, down that constitution falls, like the palace of ice in the beams of the sun. This is that peculiar influence which we sometimes see so remarkably exemplified, sometimes combined with muscular force, at other times apparently dissociated from it, termed, in vulgar language, "a good constitution." Many, even females of delicate appearance, who have not by habit been associated with sudden changes or depressing privations, will struggle through want, privation, the effluvia of disease, the changes of the atmosphere, and still retain the balance of the powers. This is an illustration of the preservative principle.

Again :—there are varying degrees of pure muscular power. Power is not to be estimated by mere weight, by the mere rapidity with which a body can be hurled through the air, or ease with which it can be dragged along the surface of the earth. For instance :—a man who lifts four cwt. may have great power ; but it is not yet decided whether he has all its ramifications. It is not the force of a simple individual muscular contraction which is to be estimated relatively to health, it is the duration of that force. He who lifts four cwt. with ease, could not probably struggle through a day's march, or a harassing campaign. His enormous strength would be exhausted by its first impulse ; and he would be lacking in that great qualification, which would sustain him through continued exertion, without permanently injuring the constitution.

There is an extraordinary resemblance between the physical and moral powers, and the similarity presents an illustration. Many, from the momentary action of moral principles, might resist successfully a powerful temptation, who would yield to a series ; whilst many, who would have to call up all the aid of long established habits and associations, and with difficulty resisting the evil, would hold on their way, by the self-preserving energy of their own principles, through a continued succession.

It is thus with the material frame, the grand desideratum supplying all deficiency. The key-

stone preserving the fabric is that peculiar influence which, whether it be a cause or result, gives to the balanced powers of the human body the character of permanency. I know a gentleman whose muscular strength is remarkably low, but whose capabilities of continued exertion are equally remarkable; and I should unhesitatingly pronounce him in possession of a better species of constitution than many whose physical force is much greater. I have known him, through all the fatigues of study, irregularity of living—passing from the dice-box to the wine-cup, and thence to the routine of college duties—and yet his buoyancy was retained, and his health not permanently affected.

Again:—health is not entirely dependent upon the condition of the physical powers. The air may be pure, the diet nutritious, and the varied organs in a state of healthy action, and yet the individual may not be vigorous. There must be the concurrence of the mental faculties.

It is impossible to say when or where is the point of union between body and mind,—when or where impulse partakes most of the physical or mental character. But in spite of this mystery, the union and reciprocal influence does exist, and is perpetually exercised. And hence, in addition to all these numerous attributes essential to health, there must be that condition of mind which is neither too excited or too depressed to interfere with physical movements. It is not essential at present

to demonstrate how this mental equanimity may be attained, whether by moral or physical agencies ; but there can be no permanent compromise between the two. Mental depression may sometimes be relieved by the adoption of medical remedies, whilst the victim is still surrounded by all the annoyances of life which diminish the degree of power ; but it is at the expense of the material system that mental tranquillity must be restored. The qualifications of a healthy man are numerous ; it is a condition which presupposes perfection in structure and function, harmony in combination, and tranquillity in the presiding mind, together with the possession of the preservative principle which gives permanency to the whole. All desire to attain it—all do not succeed ; some lose it in striving after a higher degree of power than the fabric is capable of permanently sustaining,—they resort to stimulants and miss the mark. Some, from the hurried arrangements of life, undervalue the blessing which gives a zest to all others, and neglect their meals and their rest.

Others, from the calamitous visitations of Providence, have been ushered into existence with a diminished degree of the preservative principle, and they linger on through existence, they know not health. Excitement, pleasure, all have their votaries ; some cultivate the intellect alone, others the physical powers ; but it is he who maintains the balance, who does not allow the mind to be ram-

pant in its own activity, or languid in its depression, who does not exhaust the powers of his body, nor let them wither in lethargy ; but who is active without violence, industrious without exhaustion,—whose habits and necessities run parallel. He is the being who lays claim to health, and in the majority of instances is its living exemplification.

This condition is usually the result of the observance of certain laws, the laws of temperance ; but the contradictions to this rule are remarkable. Health is lost in spite of regularity of diet and regimen, and retained in the midst of the greatest excesses. And we frequently discover the temperate man and the drunkard attaining a lengthened old age.

How is this to be accounted for, unless we admit the operation of that preservative principle which has been illustrated. It may be demanded,—Are we in a natural state of existence ? Are we in that physical and social condition, for which the human frame was destined ? This is a pertinent question. The majority of the human race is not in a natural state. The densely populated city ; the crowded apartment ; the atmosphere loaded with the noxious products of combustion, or the effluvia of vegetable and animal decomposition ; the diet insufficient, and that scanty quantity adulterated ; rest interrupted ; mind harassed, at the expense of the physical powers ; and that state of riot and debauchery into which thousands are plunged,

constitute a condition which may be pronounced unnatural, and at variance with the best interests of the human body. If this condition be the subject of inquiry, it will be found that the great proportion of the human family is not only in an unnatural state, but in a state opposed to all the laws of animal life ; but, in this respect, society, in its more educated ranks, is decidedly on the advance. Civilization and cultivation instead of, as some suppose, enervating the human race, vastly increase their average health and longevity. Civilization will bring many diseases in its train unknown to savage life ; but civilization is not attended with famine—depopulating whole districts. Food, if adulterated, is varied ; and diseases, though prevalent and numerous, are ameliorated by art.

NATURE AND FUNCTIONS OF THE LIVER.

THE design of this popular treatise is to illustrate the diseases of the liver, not so much for the profession as the public. Whilst other maladies are brought under the inspection of the public, this has been neglected: whilst its lamentable prevalence is scarcely admitted.

To enter into a minute anatomical description of the liver will be unnecessary. There are, however, preliminaries which must be presented to the reader; its relative situation will strike him, being in contact with the diaphragm, the stomach, the duodenum, the right kidney, &c. Contact or approximation presupposes direct sympathy, and the reader, before he advances a page, will recognise the organ as in immediate vicinity with the most important organs of circulation and digestion. He will find it situated between the organs of circulation, digestion, and respiration, and destined to perform a process which is essential to the integrity of the functions of these three powers.

Every one knows that the liver is an organ of paramount importance, secreting a liquid called bile, which flows in the duodenum on the surface

of the chylone, and contributes to its elaboration. All agree that the bile is secreted by the liver; the question of dispute is, whether the materials are furnished by the hepatic artery or the portal vein.

The arguments in favour of the assertion, that the materials are furnished by the portal vein, are as follow:—

1. The greater similarity between the bile and venous blood, than between it and arterial.

2. The very considerable volume of the portal vein compared with the small calibre of the hepatic artery.

3. The abundance of the biliary secretion bears a proportion to the development of the portal vein.

4. We have the testimony of Richerand, one of the most faithful of modern physiologists, that a ligature on the hepatic artery does not diminish the secretion of bile, whilst obstruction in the portal vein invariably suspends it. But why should the reader be perplexed with these interminable controversies? The simple question is, what is the office of the liver? Assuredly to secrete the bile. But this secretion—does it serve exclusively the purpose of digestion?

The following are arguments which will be amply illustrated in the course of the work—they are extremely remarkable. 1. The striking analogy which exists between the liver and the lungs. 2. During intra-uterine life, when the lung is

without action, the liver is singularly developed. 3. In hot climates the lungs absorb less oxygen, whilst the activity of the liver is proportionably augmented. In pulmonary consumption, the liver is increased in size, and the bile more abundantly secreted. As soon as the functions of the lungs commence, the liver is diminished in size; this is observed in infants. These are extraordinary coincidences, too often overlooked in practice. Let the sanguine writers on "Consumption Curable" look at these; and from such analogies they may form theories which may stand the test of time, and bear the name of utility. It cannot be doubted, then, that if one of the functions of the liver is to secrete the bile, whether it be secreted by the portal vein or the hepatic artery, is practically of no material consequence. To the ancients, the functions of the bile were a comparative mystery, and it has been left for modern chemistry to solve the difficult question. It has been ascertained, by the aid of chemistry, that the bile is composed of multifarious elements, a substance called ozmazome, and an acid containing azote, which unite themselves with the dissolving food; whilst the other elements, as the resin, the fat, the colouring matter, the mucus, and the salts, are evacuated with the rest of the alimentary substances, conjointly with them constituting the excrements. There is something peculiar about the action of the resinous part of the bile, it exercises a powerful influence on

digestion by stimulating the mucus membrane of the alimentary canal to throw out a more abundant exhalation, and also the muscular coat of the same tube to more active movements. In fact, the bile is the natural aperient of the bowels, and this indicates the importance of acting on the bowels through the medium of the organ which secretes their natural aperient. For it is a principle in medicine, which is indisputable, that to increase a natural action is far more congenial to the laws of the animal economy, than to call into operation that which is purely artificial. There is a very providential arrangement respecting the bile of the fœtus, which is secreted about the fifth month, viz., gradually habituating the intestines to the stimulating qualities of a foreign matter, prior to digestion; and were this not the case, the first act of digestion would probably be fatal.

DISEASES OF THE LIVER.

THE important organ to which we have been alluding, is frequently diseased ; and a moment's reflection on its locality, its sympathies with respiration and digestion, will show that derangement cannot be confined to itself, but must influence the whole system. Positive disease of the organ is by some considered rare in these temperate climates — but this is not correct ; that active inflammation which speedily terminates life may not be extensively present I admit, but that constant derangement of function, which is essentially a characteristic of an eating and drinking country, commencing probably at the age of twenty-six, and continuing with varying symptoms until the close of life, must leave the organ in a condition positively diseased. Medical men talk of the disease of the stomach — the appetite bad, digestion imperfect, it is immediately pronounced disease of the stomach, whilst the liver is forgotten. The experience of years has proved to me that disease or derangement of the stomach, as a primary affection, is extremely rare, whilst every symptom attendant upon indigestion, &c., has been traced to derangement of the liver,

and subsided on the restoration of that organ to its legitimate functions. The stomach, from its comparative simplicity of structure, is difficult of derangement, whilst the liver, with its complicated machinery, is necessarily in jeopardy from its complexity. Disease of the liver is identified with hot climates, and in one especial form the statement is correct. The liver, it must be remembered, is the centre for a peculiar circulation, the quantity of blood passing through it is enormous, and where that circulation is affected, this important organ will be in a state of danger. But climate does not consist merely of humidity and the physical characteristic of the atmosphere and soil, it must be taken into consideration with the habits which the climate originates. Englishmen, passing from a temperate to a tropical climate, are surrounded with unnatural phenomena, and it is with difficulty that the balance of the powers, and the full energy of those powers, are sustained. The preservative principle to which we have alluded, is here taxed to its utmost capabilities, consequently, every deviation from the laws of temperance is attended with tenfold danger, as the constitution is so powerfully tried by the new change, that the "sinking fund" of health, if I may so speak, is almost exhausted. The habits of these climates are vicious ones; peppers, stimulating sauces, alcoholic drinks, are here consumed in a dangerous abundance, and the consumption is increased with the danger, and is

seldom attended with impunity. One enervating agency is with difficulty sustained, but when, in addition to the paralyzing power of temperature, is added intemperance, the human frame is speedily broken, and the liver is the seat of the disease in its most active forms. The liver, then, is essentially the grand seat of disease in tropical climates—but that does not diminish its prevalence here: there derangement of the liver is associated with symptoms which, if not relieved speedily, terminate in death; here, assuming a more insidious form, it lingers through life, apparently not subtracting a moment from its duration, but lamentably from its happiness and its ease. Hypochondriasis, with all its gloom; indigestion, with all its annoyances; pain, uneasiness, and absence of vigour, are the perpetual results; whilst the cause is unsuspected and remains unrelieved, or is mistaken and is aggravated. We have not the climate of India, but we retain its vices; gluttony and drunkenness are the bane of temperate climates, especially our own. Englishmen eat *too much*, and drink *too much*; the amount of food consumed is frightful to contemplate, whilst the absence of a *single meal* is looked upon with horror. The diseases in England differ in type and in rapidity, but still they are diseases; and it is an *axiom* which ought to be lettered on every dish-cover, table-napkin, and goblet, “Disease of the liver is *the disease of all countries where there is excess in eating and drinking.*”

CAUSES OF DISEASE OF THE LIVER.

THE causes of all diseases, especially of that under discussion, may be divided into predisposing, determinate, and occasional. Amongst the predisposing stands pre-eminently the Bilious temperament. There is a peculiarity associated with every individual termed temperament; it is identified with his very being, influences his character, his diseases, and is changeless. There are certain temperaments which are classified, to one of these the individual belongs. They are essentially distinct from each other. Amongst the most striking is the bilious temperament. It is a remarkable temperament; and were those men selected most celebrated for decision of character, permanent mental power, and achievements which have been the result of long sustained moral exertion rather than the instantaneous movements of genius, the majority would be found identified with the bilious temperament. In addition to the temperament, we may notice the sex, the disease being comparatively rare with females, first, from temperament, secondly, from habit; females being excluded from those habits of dissipation which are a prolific source of inflammation of this organ.

The sedentary life of the scholar is another predisposing cause; during intense mental application an individual forgets to breathe with regularity, and until the equilibrium is restored by a sigh, which is usually the case, there is a sensation of uneasiness. If the atmospheric air be not inspired with regularity, the blood will not be sufficiently decarbonized; and when we know that the liver is the outlet for the carbon of the body, the rationale of this predisposing cause will be understood. Again, an individual leading a sedentary life is dissociated from that regimen which preserves the body in health. Digestion is laboured, the bowels confined, the atmosphere probably impure, and if this be in connexion with the bilious temperament, the tendency to hepatitis is materially enhanced. Again, when a stimulating and nutritious diet is consumed by such an individual, there is an additional predisposition on account of excessive secretion, with diminished absorption; it being essential to health that there should be a balance between the two. But the sedentary includes within its pale, not merely the scholar, but the loungeur who rises at mid-day, destitute of employment, and whose only object is to kill time; takes his coffee at eleven with anchovies and buttered toast, his soup at two, his dinner at seven; compound aliments, luxurious to the palate but poisonous to the organs of digestion; whose mind is only sufficiently active to convey the varied impressions made on sight,

hearing, and touch, almost too languid for that; whilst a combination of impressions to form a definite idea, is a task which is seldom begun, and still less frequently completed. This is a man who is predisposed to derangement of the liver. Again, where a salutary discharge is too hastily arrested, there is a danger of its occurrence. All mental emotions of a distressing nature are recognised as predisposing causes, though they are frequently results. There is such a mysterious connection between body and mind, that where no assignable cause of mental depression exists, we scarcely can tell whether the mental depression is a cause or result.

All mental excesses, all undue indulgence of the passions, associated with a bilious temperament, may be ranked under the denomination of predisposing causes. All excess in eating, not that excess which amounts to gluttony, but even that which extends to mere repletion; all eating to repletion is an excess, an excess which oppresses the circulatory and digestive systems. The abuse of alcoholic drinks—this, too, consisting not merely in drunkenness, but in the consumption of an unnecessary quantity. It is well known to the profession and to the public, that there is a state of the liver, so commonly found in drunkards, that it is termed the “gin-drinking liver.” What, therefore, has been said respecting tropical climates

may here apply ; there may not exactly be the gin-drinking liver, but there may be a deviation from a healthy state, and an incipient condition of the diseased one.

USE OF ALCOHOL,
WHEN IT IS INJURIOUS, AND WHEN NOT.

MUCH has been written and more said respecting the consumption of fermented liquors. Many advocates of total abstinence, urging as an argument that the use of alcoholic drinks is unnatural. This argument amounts to nothing, because the term unnatural in this sense has no definite signification, as the elements of which alcohol is composed are elements which are found in the human body, and which are essential to its existence—hydrogen, oxygen, and carbon—into which elements all wines and spirits must be ultimately separated. There is no substance whose elements are identical with those of which the human body is composed, the moderate use of which is injurious. The opponent may assert that the constant use of opium is injurious—admitted; but opium contains *morphia*, which forms no part of the body, and is foreign to it. The majority of drugs owe their power to a foreign active principle. This is the case with digitalis, hemlock, colchicum, and all the active preparations. There is associated with these something of a pecu-

liar nature, sometimes in the form of an oil, sometimes of an acid or alkali, which is positively elementary, irreducible into a divided form, the foreign aid of which is called in to counteract disease, or restore the balance of the circulation. To make a condiment of these, even in their smallest doses, is injurious, because there is a principle set at liberty which cannot be connected with the human body, but remains as an irritant or a sedative, without aiding digestion or contributing to the economy of the body. Food becomes obnoxious when elements are introduced which cannot be resolved. But this cannot be asserted of alcohol, or wine; there is nothing essentially injurious in the elements of which it is composed. Elements cannot combine in a purer form than in alcohol, and he who pronounces it unnatural must discard the use of bread and water, for even then he is consuming hydrogen, oxygen, and carbon.

Let us look at the opium-eater, a man who resorts to a stimulant, but in addition to it introduces into his system a paralyzing active principle, viz., *morphia*, *narcotine*, which never can contribute to the formation of the body. He is invariably emaciated by its influence, unless there is in the human frame, as was the case with the celebrated Robert Hall, a virulently painful disease, on which the power of the narcotic is expended. Was ever such a case known as an opium-eater retaining his faculties and strength till the age of eighty?

Whilst we daily see many who have wallowed for half a century in beastly intoxication, who have retained health and faculties till the last. And why? Because the intoxicating liquor was composed of nutritious and natural principles. But when these simple elements are used in excess, then they become dangerous. This is the case with all species of diet, with *water* itself and with bread. Excess of light, heat, clothing, &c., with calamitous sequences, ought not to lead to their exclusion. "Light is good, and a pleasant thing it is to behold the sun:" but to collect its rays into a focus and to concentrate them on the organ of vision, is to destroy it. Wine, too, is good when its quantity is regulated by prudence. When the three powers are losing their balance and have degenerated from Twelve to Nine, no uncommon occurrence in the gloom of sorrow, in the excitement of business, when contemplating the miseries of fallen hopes in the desert of a cruel world, the wine-flask, more exhilarating than the bottle of water to Hagar's child, has restored the balance and increased the power. When is wine necessary? I will tell you when. In this commercial country a commercial simile will be understood. There are many men in business who, could they obtain the loan of £100 for a few days, would be saved from utter ruin. A bill is due, the returns of the following week would be certain to meet it, but the money is wanted now. "Lend me £100 for seven

days and I am safe ; refuse me, the returns of the ensuing week, though certain, I cannot wait for. I am ruined for want of power, a momentary power which would place me on an elevation where I could throw out my energies." Just so with wine. The powers are down to Seven, it is too low an amount of power to sustain health ; they are gradually sinking to Six or Five ; could they be raised to Nine, the individual would be safe, because from Nine to Twelve, he would spring by the elasticity of his constitution. This is the moment for wine ; it is the £100 which meets the difficulties of the day, and sustains the individual till he has the returns of the ensuing week. It gives an impulse to the three powers, which the preservative principle, being rallied, maintains. Avoid, then, excess ; recollect that the elements are natural, but excess of natural elements will destroy the fabric. Reserve the use of these elements to raise the power from Nine to Twelve, not from Twelve to Twenty ; and, as a physician and reverer of the word of God, I would say, " Use a little wine, for thy stomach's sake and thine often infirmities." Abuse it, you will have disease of the liver, and deserve it.

The determinate causes which lead to disease of the liver are as follow :—It is frequently produced by blows upon the region of the liver. Where there is a predisposition to this disease, it frequently succeeds to sudden immersion in cold water, and the consequent interruption of the

action of the vessels of the skin. The sudden arrest of a diarrhoea, or hæmorrhoidal discharge, may originate it; nor is this uncommon. The sudden arrest of any discharge is dangerous; and there is no active disease which may not be the immediate result. A very common cause is the existence of biliary calculi in the hepatic canals, it is extremely likely to produce violent and permanent inflammation. All irritations of the alimentary canal, whether the result of ordinary inflammation, or of the abuse of irritants. Nothing more likely to superinduce a virulent hepatic disease than the constant use of drastic purgatives. This is a prolific source. The habit of employing these medicines is lamentably on the increase. Persons, on the plea of economy, are in the habit of applying to the chemists and druggists for an aperient pill and draught. These men, who are necessarily ignorant of the delicate structure of the lining coats of the stomach and bowels, are in the habit of prescribing indiscriminately the most irritating medicines, such as aloes, gamboge, scammony, colocynth, &c. &c., which may give temporary relief from head-ache and fever, but which lay the foundation of a distressing hepatic disease. No language, however strong, or exposè, however searching, can be too severe to demonstrate the melancholy and dangerous results of this practice. The delicacy of the lining coat of the bowels is so fine, as to preclude the majority of these medicines

in their larger doses, except in cases of extreme danger; and yet they are daily administered for the simplest derangement of the digestive organs, and are as prolific of constitutional injury, as the adulterated gin of the metropolis. The same remark applies to the abuse of the various "patent medicines" which are distributed through the country, the ingredients of which are of the most injurious tendency; and as the disease under discussion is so lamentably on the increase, it is not rash to assert, that one cause is evident in the universal abuse of these dangerous and irritating medicines. It is well known that the substance of the bowels consists of a mucus and muscular coat. Whether constipation arises from one or the other is a question which alone can be decided by a competent and educated physiologist. To irritate, therefore, the whole mucus coat of the intestinal canal, to set up, both directly and indirectly, an excessive hepatic secretion, merely to overcome the rigidity of the muscular coat of the lower bowels, would be an act of great temerity. Again: to administer a medicine, the specific action of which is on the muscular coat of the bowels, merely for a slight deficiency in the serous discharge, would be equally injudicious. And yet these varied medicines, possessing the most irritating qualities, are indiscriminately administered by hundreds of uneducated men; and hence, amongst other maladies, disease of the liver. Another very common source of he-

patic disease is the abuse of bark, or the sulphate of quinine. Quinine is a fashionable medicine, and every lady who lies languidly on her ottoman is conversant with its properties. Its effect on the appetite is great, the stimulus which ensues is a permanent one; *hence its abuse*. Many of the fair sex, who would shudder at the allusion to gin or brandy, indulge in a habit equally injurious, when they swallow injudiciously Quinine pills. The stomach is subjected to a stimulus beyond its healthy degree, and the hepatic secretion becomes morbid; whilst a general constitutional irritability is the natural consequence. The abuse of bitters is a prolific cause—a general one. There is, in the human constitution, an intuitive love of stimulant; and human nature frequently exhibits great weakness when discussing this particular subject. The thousands who resort to the stimulus of the common dram shop are condemned by those who are taking anti-spasmodic draughts from the apothecary; the “baby’s gin-glass” is spoken of as a specimen of the degeneracy of the age, whilst the infant of the objector is probably in the act of being stupified by “Dalby’s Carminative;” and the folly of the wine bibber is frequently rendered the subject of satire by the man who has just finished his opium. All excess is bad, alike to matter and to mind; the human frame, like the instrument of music, requires a peculiar touch, that touch may be varied, on account of the rich com-

pass of the notes ; beyond this compass, harmony ceases, and the rude hand which attempts it frequently destroys the instrument. The individual is capable of a certain amount of excitement, and, to restore this when drooping, the aid of stimulants is called in ; but it is when it has reached its proper level, there is an attempt to increase what is natural by an artificial agency, that the agent becomes abused.

Disease of the liver, in its more active form, is frequently a result, and sometimes an accompaniment of affection of the head. There is a remarkable and direct sympathy between the liver and brain, through the medium of the nerves. And it is really astonishing the number of literary men who are the victims of this malady. At the time I am writing, there are many clergymen whose lives have been employed in uninterrupted succession of mental labour, who have been martyrs to this complaint.

Diseases of the brain and liver are frequently found existing at the same time. And it is the opinion of Desault, and of the most eminent surgeons of the present century, that abscess in the liver is the frequent consequence of abscess of the brain. All causes which precede general inflammations, such as exposure to cold, the irritation of eruptive fevers, as scarlet fever, measles, &c., are sometimes followed by disease of the liver. Falls and blows of the head too frequently superinduce it ; and too

frequently is the malady overlooked, the attention being absorbed in the anxieties attendant on concussion, delirium, hæmorrhage, and trephining. To illustrate this, many instances might be brought forward, of recent occurrence. The sympathy between the liver and brain is as direct as between the optic nerve and the brain. It is demonstrated by anatomy, and by facts. I would not recognise, as an active cause of this disease, the homocephalic system, because it has not the power of directly inflicting injury. There is nothing in the system of an irritating nature; it recommends nothing which can morbidly stimulate the organs of life; it proceeds on the principle of harmlessness, and invariably terminates in inefficacy. To designate it, therefore, a cause of disease, would be to make an unjust assertion. But because its medicaments do not actually cause disease is no reason why it should be left unnoticed. A system is not perfect or compatible with the human constitution, because its dogmas do not lead to immediate poisoning; but if it bear the character of inefficacy,—if, in its attachment to harmlessness, it allows disease in all its virulence to go unchecked,—if its only recommendation is that it does not produce constitutional irritation,—then it is as dangerous as though it did. In what does the act of curing consist? Merely in the principle of antagonism. Where there is no antagonism there can be no cure; nor can there be, when the curative force is the least powerful.

Homœopathy disclaims this principle in toto. Is it then harmless? Certainly not; because no fallacy is so. Can it then be brought forward as a cause of disease? Not entirely; but it may be regarded as a principle which cannot overcome it. The limits of this treatise do not admit of an extensive exposè of this system; but let the public be on its guard, let it recollect that the principle of cure is that of antagonism, and any system which proceeds on another basis will be found invariably fallacious and sometimes fatal.

NATURE OF DISEASES TO WHICH THE LIVER IS LIABLE.

THE important organ to which we have alluded is subjected to a variety of diseases. For example : —the inflammatory state of it may be either acute or chronic. There may be hypertrophy, or increase of the organ in its whole extent ; or atrophy, or a diminution. The liver may be indurated, or be in a softened state. Again : there may be tubercles in this viscus ; nor is this uncommon. There is in some constitutions a singular tendency to tubercular deposits, and these tubercles assume a variety of character. There is a diseased state, termed the “ fatty liver,” which consists of an enormous deposit of fat, amounting almost to a transformation into it. Most have heard of the diseased liver of geese, &c., esteemed by “ gour-mands” an extraordinary luxury. This is the fatty liver, and is induced by complete rest, by confinement in the dark, and by the use of a diet which is highly nutritious and stimulating. We sometimes find inflammations of the veins of the liver, sometimes cysts. Thus, on examination of bodies, there has been observed dilatation of the ducts

which conduct the bile, occasioned in all probability by the passage of gall-stones, there may be, too, obliteration of these tubes, resulting from inflammation, and thus obliteration may lead to jaundice. The gall-bladder may be the seat of every variety of disease. Gall-stones are known to be not unfrequent. There may be a morbid state of the bile itself. In the majority of cases, it produces no other perceptible symptoms than a nauseous and bitter taste in the mouth; but in some cases it becomes positively acid. The bile, as was mentioned, is composed of various elementary principles, which require to be present in due proportion, otherwise the secretion is morbid; when the bile, therefore, is diseased, there must be a chemical change in it. For instance,—there may be a preponderance of the resinous principle, or, on the other hand, there may be a deficiency; there may be an excess of the osmazome of the cholestrine; whilst in some cases it has been almost entirely deprived of its active principles, and has consisted of albumen and water. And these changes will fully account for the formation of foreign bodies, such as gall-stones, &c. But it is not so much the acute stages of this malady that this treatise is designed to illustrate, as that slow, insidious, deranged condition, which is not virulent enough immediately to destroy animal life; but lingers on in the form of pain, dyspepsia, acid irritations, costive bowels, depressed spirits, &c., which

characterizes the history and destroys the peace of so many valuable members of society. It is not in the more acute form of disease that medical skill is most frequently deficient; there the symptoms assume a bolder type, and indicate the treatment; there the choice is between two evils, and most choose the less; but it is in the malady which works unseen, which impairs appetite without destroying it, disturbs rest without entirely taking it away, throws a partial blight over the enjoyments of life by diminishing the capacity for enjoyment, that the art of medicine has too frequently signally failed. How many in the circle of friendship, of which every one forms a part, can say, that "So and so has been afflicted for years, has had the first advice, and has derived no benefit."

JAUNDICE.

INTIMATELY connected with disease of the liver, is the discussion of the subject of jaundice. All know what is meant by jaundice, its professional and popular name being the same. It is well known, as characterized by the diffusion of a yellow colour over the skin and in the eyes, attended with symptoms of fever, the urine being tinged with yellow, whilst the evacuations from the bowels are white. There are many causes which may be identified with every disease to which the human body is liable. The causes of jaundice are those of the other diseases of the liver, intemperance, obstruction in the alimentary canal, sedentary occupations, and stimulating diet. The slightest reflection will point out the more common proximate cause of this malady, consisting in an obstruction in the passage of the bile in its course from the gall-bladder to the duodenum; consequently it either retrogrades into the blood-vessels of the liver, or is absorbed from the surface of the biliary ducts. A very talented member of the profession, alluding to the causes of obstruction of the

passage of the bile, asserts that they may be reduced to four in number :— 1st, those arising from biliary concretions, or other altered conditions of the bile, as well as from the presence of worms, hydatids, and other foreign bodies ; 2nd, obstructions may arise from a diseased condition of the ducts, or tubes, which secrete or convey the bile ; 3rd, the obstruction may originate from a deranged state of the duodenum, or that portion of the bowel which receives the bile ; or, 4th, there may be a mechanical pressure of the surrounding viscera. Here, then, are four different causes of one common disease, essentially distinct ; some easily removed, others not. How contemptible appear those theories which suggest one panacea for all the ills of life, when the causes of those ills are so diversified. Let the non-professional reader calmly reflect on the causes of this simple disease, and let him reconcile it with good sense,—how far the public nostrums are qualified to remove disease ? “ Oh, but they did me good.” So did the bullet which passed through the lungs of the watchman, and cured him of his asthma. Jaundice may then be either simple or serious, as it depends on an obstruction that may be either transient or permanent ; it is for the physician to decide the cause, and the nature of the cause suggests the remedy. But jaundice is so inseparably identified with diseases of the liver, that its nature cannot longer be alluded to separately from the rest.

It would be comparatively useless to investigate the causes of a disease, unless those signs which indicate its existence were demonstrated. There is not a disease in the human body which has not a specific sign, some more evident, others more obscure. Every organ has a function, nor can that function cease to act without soon exhibiting itself. The correctness with which the nature and extent of these diseased functions is ascertained, constitutes the superiority of one man over another. There are many difficulties in the formation of a diagnosis. The erroneous estimates made by patients of their own sensations; in the majority of cases if a patient be allowed to tell his own story, nine-tenths are valueless, because either entirely supplementary or exaggerated. The examination of the physician ought to be diametrically opposite to that of the special pleader. No leading question should ever be put to a patient; if so, both will be deceived. The story of a man's own maladies, notwithstanding all its false estimates and exaggerations, is best told by himself, each statement can be compared with the existing symptoms, and truth will usually be elicited. When this is done, a systematic examination should take place. First, the general appearances, which usually decides the temperament; then the state of the head, its temperature, &c., whether painful or not, whether intellect is affected or otherwise. The physician may then pass to the senses. First to

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the eye, its condition, its appearance, its colour, its sensibility to light, the integrity of its functions, if diseased, the duration of that disease. There is in the appearance of the eye an index of health or disease, especially so in diseases of the liver. Hearing may then be examined, together with the ear. The nose, the sense of smell, with its alterations. Then the sense of touch, or sensation, if this be impaired; this will give to the physician many symptoms associated with incipient paralysis. The mouth, with the teeth and tongue, should next come under consideration; the appearance of the tongue should be especially noticed, for the state of the tongue is an indication of the condition of the whole alimentary canal. If the tongue be loaded, so are the bowels; if the tongue presents marks of exterior irritation, so would the stomach and bowels. The investigation of taste would naturally lead to the examination of the organs of digestion. The state of the appetite should be ascertained. The condition of the stomach; an important sign of this is the state of the epigastrium, if there be tenderness over the region of the stomach on pressure, the probability is that there is a subacute inflammation of the alimentary canal. The sensations after eating should be ascertained, whether there seems to be excessive flatulency or acid eructations, or tendency to nausea or vomiting. Then comes the liver, as important as the rest; whether there be pain in the region. Having already ascer-

tained the state of the skin and eye, the liver should be thoroughly examined. Then the bowels, if there be tenderness on pressure, or a sense of oppression after meals. The evacuations should be especially noticed; their frequency, their consistency, and their colour. No man can prescribe aright, no man can form a correct opinion of a disease, except by chance, unless he has thoroughly ascertained the state of the alvine evacuations. There are signs of disease in those evacuations which will seldom mislead. The alvine evacuations constitute a grand test of health.

Under the head of digestion, or its products, may be reckoned the condition of the kidneys, the bladder, and the character of the urinary secretion, its colour, its deposits, and occasionally its specific gravity, all important information. The examiner may then pass to the investigation of the respiratory system; the state of the voice, the breathing, the existence of an unnatural secretion; if that exist, its nature, and, if possible, its source.

"The *stethoscope* is all *humbug*," says "Dr. So and So, and so says every man who knows not how to use it; whilst he who has made it a subject of study, derives from it the knowledge of the actual condition of the respiratory and circulatory organs, almost as exactly as though the chest were transparent. "I have no ear for the stethoscope," says another. "Do you expect to hear an overture in the lungs?" No correct philosophical diagnosis

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of the diseases of the chest can be obtained independently of the stethoscope.

From the organs of respiration the physician may pass to those of circulation. The state of the pulse should be ascertained, its character, the peculiar sensations it gives to the touch, of softness, fulness, wiriness, &c., together with its frequency. The condition of the pulse is an important symptom, but it must be taken in connection with the rest.

When all these varied organs and functions have been examined, let them be studied; let it be ascertained which is most deranged, whether if derangement of the whole depend upon the disease of one organ or not, and there will be seldom a deceptive opinion.

This plan of examination of symptoms distinguishes one man from another, the enlightened physiologist from the mere routine practitioner; and though it is a difficult task for a non-professional person to ascertain the precise amount of knowledge of the medical attendant, yet the examination is a fair test. Disease, like the derangement of machinery, is not to be guessed at, is not to be ascertained by a mere look or touch. To form a correct opinion of its *seat and nature*, an investigation, as lengthened and as minute as that already specified, must be followed out, or the physician must be content with a mere knowledge of symptoms, whilst their *cause* is still in *obscurity*. If in the varied diseases of the human body it is

essential that the preliminary examination should be minute, how much more so in a malady proverbial for its obscurity. Who is to decide without it? . Who can assert where the derangement lies, in the stomach, liver, or bowels, prior to the most rigorous investigation? Whatever the insidious nature of the disease of the liver, it is ushered in by certain symptoms, general and local. There is such a sympathy between the varied organs and functions of the body, one with another, that there can be no local disease of any duration, without a consequent constitutional irritation.

The first indication of pain is in the region of the liver, at first not very acute, and frequently disregarded; this pain extends to the region of the kidney, and either gradually or suddenly extends to the right shoulder. The pain localized in the liver, is augmented by pressure, percussion, by reclining upon the left side, by walking or even riding in a vehicle. The non-professional reader will easily recognise some of the causes of these symptoms. The pain in the right shoulder is remote; but when informed that a nerve, of the greatest importance, passes from the shoulder to the liver, the reason is apparent. Again, there will be necessarily pain when reclining on the left side, as the liver will gravitate towards it and keep up a pressure upon the irritated ligaments. Deep inspirations increase the pain. The diaphragm, the muscular septum dividing the chest

from the abdomen, and so essentially connected with the mechanism of breathing, is in close contact with the liver ; therefore, when its movements become more violent, the pain is invariably increased. In addition to the pain, there is a sense of weight, sometimes intolerable. The principle local symptom, then, is pain. There is another, though not observable in its first stage, increase of size.

On examination of the constitutional phenomena, there will be found general fever, characterized by heat and dryness of skin ; the head will be partially affected ; the eye will be frequently discoloured, and tinged with yellow. The sense of smell and hearing are seldom affected ; but the mouth is dry, and tongue loaded, whilst there is excessive thirst, and a peculiar sensation of bitterness in the mouth. The stomach, which probably has been disordered for several days, is now more so. Appetite is gone, there is frequently vomiting and acid eructations. What a providential arrangement, that in these diseases the desire for food is exchanged for loathing ! There will often be a general tinge of yellow throughout the whole skin. The bowels are usually confined, because the bile, their natural aperient, is obstructed whilst the evacuations assume a clay colour from the absence of the colouring matter of the bile. There is usually a diminished secretion of urine, and it assumes sometimes acid and sometimes a yellow appearance. The respiratory system is not so sensibly affected, though violent

motions of the diaphragm increase the pain; but the circulatory is necessarily deranged. The amount of blood that passes through the liver is enormous, and congestion there will speedily affect the whole arterial system. The pulse is full and hard, whilst the skin is arid, and devoid of insensible perspiration. The great sympathy between the liver and brain has been alluded to; sometimes, therefore, its substance and membranes become the seat of intense inflammation. Associated with these symptoms there is frequently jaundice.

But there is another state, termed chronic disease of the liver, and it is to this condition that this treatise is especially directed, on account of the insidious character it frequently assumes. The active inflammation, if not checked, is speedily fatal. The subacute condition may continue for years. This state of the liver is sometimes a consequence of a more active inflammation, but usually the result of some of those causes discussed in a preceding chapter.

One symptom of chronic inflammation of the liver is a state of the body well understood by the term feverishness; it frequently amounts to no more. The patient, if active in the midst of his pursuits, may be unaware of it; but on returning to his meals, when about to seek a little ease, there is a sensation of languor, thirst, dryness of skin, heat of hand, &c., &c., which is distressing. Attendant on this, there is a sensation of tension,

as though the skin were stretched, and scarcely large enough for that which it invests. There is too a sense of fulness, as though inflated with air, and this is sometimes observed in the region of the liver; there is, perhaps, a difficulty on reclining on one side of the body, together with an occasional pain in the right shoulder, alluded to and explained in a preceding page.

In the organs of digestion we first find a peculiar sensation of acidity, observable on rising in the morning. An acid, which sometimes produces a burning sensation, is forced into the mouth, and the sufferer imagines it heartburn; with this there is frequently bitterness. The appetite is deranged and capricious. "I would give £500," said a patient of mine, who had been labouring under this malady for fifteen years, "if I could eat bread and cheese and drink a glass of ale." I am happy to say he now can do it. The appetite depends upon the state of the liver, and in these cases it is lamentably deranged. There is a loathing of food, and when that food is taken it is attended with distressing symptoms; no food can be properly digested. The liver cannot be affected without influencing its secretions—the bile is deranged. Here should be a pause; for it is precisely at this period that the injurious agencies are applied. Man cannot endure a diminished appetite—people whose lungs are almost gone, whose organs are in a state of the highest inflammation, forget the principal malady

and complain of the loss of appetite. What fascination there seems to be in eating and drinking! The slight fever is passed over, and the varied symptoms neglected, till food becomes distasteful, and then the injuries begin. One takes a glass of brandy, but this aggravates it. Another, aperient medicine; this produces temporary relief, but the symptoms return. Then come the bitters. Quinine is taken, but no improvement; the appetite may be increased, but the system becomes more feverish. It may then be pronounced disease of the stomach, and tonics are prescribed, still no improvement; there remain the morning acidity and the evening fever, and all the other symptoms. The digestive functions cannot be thus deranged without a corresponding irregularity of the alvine evacuations. The bowels are constipated, for a reason that has been assigned, and what is evacuated frequently resembles chalk. The urine is generally heightened in colour, but there is not the same appearance as in more active inflammation; and it is remarkable that the pulse is intermittent. There is frequently associated with this, hypochondriasis. The patient is gloomy and fractious, all affairs are viewed in their darker aspects. This state commences with fidgetiness. In the middle of the night the sufferer will get up, imagining he smells fire, or hears thieves. He is haunted, perhaps, with the idea that he shall rise in his sleep, and injure himself or others. If his relatives are

travelling, he is sure to call up all the frightful contingencies of coach or railway conveyance, and imagines that they will be crushed or mutilated. If he walks beneath a spire, he imagines it falling. Every thing is going wrong in the family and in the parish, in the country and in Europe ; whilst he supposes himself the victim of every disease. Frequently this condition of mind will assume a more serious aspect, and a man who has been impressed with the truths of religion, and who has been perhaps a living example of their efficacy, will consider himself on the eve of committing the most dreadful crimes, and exposed to the divine vengeance. This is hypochondriasis—usually associated with a subacute disease of the liver, and consequently a prominent symptom. These are the usual indications of a chronic disease of the liver, but it is not always that they thus manifest themselves. Sometimes the appetite remains undiminished, and the digestive functions apparently regular, and yet there will be an hypochondriacal state, and chronic disease ; whilst in others the only symptoms are perpetual epigastric tenderness, together with difficult digestion. But there the malady remains, and though obscure, may be detected, and is, in the majority of instances, within the remedial reach of art.

DIAGNOSIS.



DISEASE of the liver may be so obscure that it may be mistaken for inflammation of other organs. Amongst them may be enumerated pleurisy, pneumonia, inflammation of the stomach, certain forms of rheumatism, inflammation of the duodenum and the kidney; many of these diseases have symptoms in common with hepatitis, for instance, fever, pain in the region of the liver, a difficulty of respiration, deranged alvine and urinal evacuations, are attendant upon each. Hepatitis may be distinguished from pleurisy, by the aid of auscultation and percussion; by it is ascertained the existence or non-existence of effusion. If the effusion be considerable, there will be an increase of the size of that portion of the chest which is the seat of it; if the effusion be less, ægophony may be heard. Again, the pain attendant on pleurisy is rather lacerating than dull, resembling the stab of a knife, and much increased by respiratory movements; whereas in simple hepatitis there is an absence of these special symptoms, the pain is not so acute, there is no thoracic effusion, &c., the digestive functions formidably deranged, there are excessive nausea

and vomitings, and all the symptoms attendant on bilious derangement. Hepatitis is sometimes mistaken for inflammation of the lungs; from this it may easily be distinguished by the rust-like expectoration, and the signs furnished by the stethoscope. It may be confounded with inflammation of the stomach; in this malady the pain is in the region of the stomach, not in that of the liver, and that pain is excessively violent, and is attended with a degree of tension; it is increased by fluids; drinks taken into the stomach are immediately vomited. It is very difficult to decide between inflammation of the liver and duodenum. It must be recollected that the bile passes from the liver to the duodenum by means of a small canal, consequently there is a direct sympathy, nor can duodenitis exist without an irritation of the liver. It is, however, a disease of extremely rare occurrence. Hepatitis may be known from inflammation of the kidney inasmuch as in the latter disease the seat of the pain is nearer the spine, and directs itself along the course of the ureters, the bladder, and the urethra. The urine, again, is less in quantity, and highly irritable, sometimes containing pus, and sometimes bloody. Finally, the distinction between it and colic is, that though attendant upon colic there may be nausea and vomiting, the pain is relieved by pressure, and instead of being constant, is intermittent, nor is there the same degree of irritation.

PROGNOSIS.



INFLAMMATION of the liver, in its more acute form, is usually attended with danger; indeed the term dangerous is applicable to every condition of disease, where the powers of the constitution, unaided by the resources of art, are insufficient to restore the balance of health. Active inflammation of such an organ, in proximity with the most important and delicate structures of the human body, cannot be otherwise than dangerous. This disease, though sometimes distinct, is frequently complicated with others; this necessarily enhances the danger; for instance,—inflammation of the stomach, of the bowels, the pleura, and lungs, the spleen, the peritoneum, and the kidney, may be associated with either of their diseases. Hepatitis may be an associate, and before a decision, as to the probable result of the malady, is given, these symptoms, or the absence of them, are to be taken into consideration. There may be, in connection with this disease, irritation of organs which are more remote, such as inflammation of the brain and its membranes, general fever, or

even a specific one, convulsions, &c. Such complications are alarming. Simple inflammation of the liver, when unsubdued by ordinary depletory treatment, has a tendency to terminate in suppuration, or gangrene; therefore, the prognosis cannot be positive until the effect of the remedy is seen. There are many examples of a favourable termination when the liver has suppurated; but they are rare, when compared with the fatal results. This is highly dangerous in the majority of instances, especially in this country. Provided the diagnosis is clear, the inflammation confined to the liver, unassociated with other diseases, the case visited in its first stages,—then, though there is danger, the probabilities are in favour of recovery, taking into consideration judicious treatment. But if there exist inflammation of the brain, or lungs, or bowels, then the condition of the patient assumes a more fearful aspect; but much depends upon the treatment. How many, pronounced by talented practitioners beyond the probability of recovery, by a change of treatment, by an infusion of confidence—this confidence is half the battle,—have been restored to speedy convalescence.

PROGNOSIS OF CHRONIC INFLAMMATION.

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THIS state is unattended with immediate danger. The patient may have been lingering through months and years of suffering, uneasiness, indigestion, &c., and there may be no probability of a speedy fatal termination. The question is not, then, will the patient live or die ; but will he be restored to health, or ease ? without which, life is a burden. Before this is decided, some questions must be asked : What have been your habits ? — “ I have been, for the last thirty years, a gin-drinker, and that to excess ; I have been the victim and the perpetrator of all the vices ; my liver is diseased, my appetite gone, my health shattered ; whilst my age is seventy.” I fear, my friend, there is but little hope for you ; you may be relieved, perhaps ; but a perfect restoration, though not impossible, is unlikely. But this state, represented in the form of a dialogue, is an extreme case. If there be no extensive organic disease of the organ ; if the malady consist rather in deranged functions ; if there be not disease present in the constitution, some virulent disease, as consumption, &c. ; if

there be left a moderate degree of the preservative principle ; or, in other words, a good constitution, —prognosis is decidedly favourable. And why ?—because the organ is within the direct reach of remedies. It is certain that an organ may become habituated to the derangement of its own functions ; but this does not prevent their restoration. I would desire to be well understood, and for that purpose will repeat the prognosis. When is chronic disease of the liver likely to be beyond the reach of remedies ?—When it is organically diseased ; when the constitution has been shattered and is breaking up ; and when old age has withered up that elastic principle of life which is essential to all restorations. When is it within the reach of art ?—When the malady consists rather of functional derangement than organic disease ; when the constitution is good, if not vigorous ; when there is no other breakening disease ; and when there is a power to apply the remedy, whether it consists in the use of medicines, or in privations from the injurious luxuries of life ; then the prognosis is favourable.

## TREATMENT,

SHOWING WHAT OUGHT TO BE THE MENTAL CONDITION OF THE PATIENT PRIOR TO THE TREATMENT OF ALL DISEASES, AND DURING THE USE OF THE REMEDIES.



THIS subject, both in works on medicine and in private practice, is lamentably overlooked. There is such union and sympathy between mind and body,—the impulses of the one over the other are so powerful and so certain—that I cannot neglect the opportunity of demonstrating to the invalid the condition of mind he should possess, in order to facilitate his recovery. There is a power in the mind which, by the majority of practitioners, is seldom called into exercise, and still more rarely judiciously. There are some remarkable facts on record, illustrative of the restorative powers of the human mind. With the following fact I am personally acquainted, it having been communicated to me by a celebrated professor of medicine. A gentleman was taken very ill, and was visited by a physician of eminence. The doctor pronounced it cholera, the worst and most helpless case he had ever witnessed. On returning from the room, the physician spoke not of recovery, but burial. The

patient, during the investigation, watched the countenance of the medical adviser, and soon caught the idea that there was no hope. On the doctor's leaving, the patient said, "I know what the doctor thinks; he thinks I shall die; *but I won't die!*" Nor did he; the rising energies of his soul saved him. Here, then, is a remedial agent; it merely requires judicial exhibition. In the more acute diseases of the human frame, the cerebral functions are frequently too much deranged to allow of mental effort; but in the slow and lingering disease, or in that stage where human life seems oscillating between this world and another, then the remedy may be applied. In the first place, pre-supposing that the physician is a man of skill and discernment, the condition of the mind ought to be that of confidence in the remedies employed. Confidence cannot be created, but it can be acquired. No one knows the toil, the anxiety, of the medical attendant, when the patient under his care betrays symptoms of want of confidence. His plans are defeated; his treatment, by the opposing act of the mind, attended with injury; and though his knowledge of the disease may be perfect, yet he cannot enter into those minute details which are comprehended by the professional man alone. If the examination has been made as specified; if there be no tremor in the tone, no uncertainty in the diagnosis; if the physician meet disease with the expressed consciousness that his art can sur-

mount it,—patient, give him your confidence, and say, in the language of the above-mentioned gentleman, “I won’t die !” There are diseases, such as organic affections of the varied organs, where such a speech would be rashness ; but the principle holds good throughout. Hang not around the sick couch the pall as a drapery—levity is indecent ; but paint in light and glowing colours the happy results, the sacred joy, that will fill the heart of an anxious wife and devoted children, on restoration to the world ; and say how much fresher and greener it will look in consequence of a partial retirement. Solemnity becomes us, when human life is struggling to live, but no gloom ; confidence, confidence. Let me not be mis-understood ; nor let it be imagined that I approve of that false glow of deception which is sometimes given to prevent mental uneasiness. Where there is danger, it should be told. Whatever may be the religious opinions of others, I cannot but regard with dread that mistaken kindness which will cry, “Hope, hope, when there is no hope,” deceiving the unhappy sufferer on the brink of another world, by the prospect of being speedily restored to the present ; allowing men to approach the threshold of eternity without knowing it, by terming a fatal ease, and a fatal exemption from pain, a favourable sign. If man is prepared for this great change, it will not agitate him when he knows it is coming ; if not, to conceal it may be attended with conse-

quences too awful to be discussed in such a treatise. But still the grand secret is hope ; it is a remedy which never inflicts injury ; it gives an impetus to the energies of the constitution ; and has rescued thousands, who would have died without it. The mental condition of the patient ought to be hope.

## TREATMENT OF INFLAMMATION OF THE LIVER IN ITS ACTIVE STATE.

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It is important to form a correct diagnosis, essential to the peace of the patient and relatives, to prognosticate the result. But the most important part is the treatment: a mistake in the treatment of many diseases may be remedied, in this it is disastrous. All that has been said respecting the structure of functions and relation of the liver, must be borne in mind, to enable the reader to form a just conception of its treatment.

If here, then, it is decided that the disease is hepatitis, and when the condition of the constitution warrants it, bleeding is to be resorted to. The object in view is to obtain a termination in resolution. It must be evident that to unload the blood vessels, and to diminish the action of the heart and arteries, is theoretically and practically judicious. To what extent, it may be asked would you bleed? until the pulse is affected. The grand source of failure in bleeding is in relying on the graduated measure, rather than on the effect produced on the pulse and on the pain. If the inflam-

mation be very intense, if after general bleeding the pain is still unabated, leeches may be applied to the seat of the pain. When the patient is much emaciated, leeches may be applied in lieu of general bloodletting. It should be ascertained whether, prior to the setting in of the inflammation, any accustomed discharge had been suppressed. If piles, leeches must be applied to the anus to restore hæmorrhage; if the monthly discharge, every means should be adopted to restore it. The system of applying leeches to the anus, so frequently adopted in France, is seldom resorted to in this country; it is an admirable remedy, the parts being liberally supplied with blood, the vessels become more quickly unloaded.

In the mean time, it is absolutely necessary that the use of all stimulants should be suspended, while the thirst may be quenched by the copious use of diluents, such as barley-water, lemonade, orangeade, &c. The diet should be abstemious, almost amounting to abstinence. There should be absolute rest, indeed this ought to be the case in all active inflammations; light, sound, &c., should be excluded, whilst the body ought to remain in the recumbent posture, and by this means the blood has not to force itself against gravity.

Great relief may sometimes be obtained from the use of the warm bath. The good old plan of the foot-bath is an excellent one, as it is always safe to draw the blood into the extremities.

The next thing to be done is to administer a large dose of calomel, but this subsequently to the bleeding; the dose may vary from five to ten grains. This should be followed by saline aperient medicines. This being done, the patient should again be visited in the course of six hours, the state of the organs examined, and if inflammation is unsubdued, the practitioner should have recourse to a second bleeding. Hepatitis is a disease in which local bleeding seems more applicable than any other, and leeches should be applied, and when removed, the hæmorrhage should be encouraged. Much, in these cases, depends on the intelligence and care of the nurse; many are lost through the inattention of this functionary, when, if the directions of the physician had been conscientiously adhered to, life might have been preserved.

To apply blisters in the inflammatory stage, though usual, is wrong, very wrong. The irritation produced by a blister is intense, and there is sufficient in the inflamed organ without increasing it. Blisters are often applied when there is a doubt as to what ought to be done. Oh, this hit or miss work, how dangerous, and how contemptible in every department of life! When the preceding remedies have been used, when there is a diminution of inflammatory heat or tenderness, when there is less sense of oppression in the epigastric and hypochondriac regions, we may conclude that the inflammation is abated, and

is passing to the second stage. But, if after the use of the mentioned remedies, there should still continue tumefaction, there is reason to fear the formation of abscess, and the treatment must be changed. The strength should be supported by wine, and vegetable tonics, or the mineral acids, but the stomach should not be overloaded with food, the diet being merely farinaceous or gelatinous. The object of the treatment in the first stage, was to prevent abscess; the intention in the second, is to facilitate its formation, and, consequently, poultices and warm fomentations should be applied to the region of the liver, and when there is satisfactory evidence of the existence of matter, it should be evacuated by means of a lancet.

In a treatise intended to illustrate the liver and its diseases in a popular form, it is not necessary to allude to the singular modes by which matter formed in the liver has been evacuated, whilst we would deprecate that temerity which induces an individual to undertake the treatment of disease from a mere perusal of a popular illustration of it, we would encourage every effort to enlighten the public on that subject of which it is most ignorant, "the theory and practice of medicine."

But, supposing the active inflammation of the liver has been subdued, and there is no tendency to the formation of abscess, what then is the treatment? Decidedly restorative. Where the powers of life are not sinking fast it would not be

#### INFLAMMATION OF THE LIVER.

judicious to commence with wine, or even with the vegetable bitters, such as bark, &c. ; it is generally recommended, but is not the wisest plan. An unnecessary irritation is frequently the result of the premature exhibition of these medicines. It is preferable to commence with the mineral acids, in medium doses. The most valuable of these is decidedly the nitro-muriatic, it amounts almost to a specific. When this produces no irritation, a vegetable infusion, such as gentian, or calumbo, or quassia, may be exhibited with the acid, and the patient may commence the use of wine. The best wine is claret. By the use of these remedies, you guard your passes and prevent relapse, nothing is more disheartening than a relapse especially if the result of your own rashness. People are not to be hurried on to health, but led to it by the hand of prudence. Whilst administering these remedies, the bowels should remain in an open state ; and if the secretions are depraved, administer alteratives. When the patient is apparently convalescent, it is unwise to abandon immediately the use of remedies when the disease has been virulent. The use of the nitro-muriatic acid should be invariably continued as a beverage for some weeks, and if there should be a tendency to congestion, let a dose of aloes be administered. The dose of aloes is usually too large ; when given in the dose of three grains only, it is a valuable tonic, and seems to have an action on the liver. Thus the reader

will perceive the principles on which the physician acts in the treatment of this formidable malady. It is not necessary to illustrate every mode of acting. The principle is first to decrease excessive action; supposing (again resorting to numericals) that the state of the body is at sixteen, it must be reduced probably to seven, not merely to twelve, which is the prescribed standard of health; and when reduced to seven, and there maintained, and there is a probability of its sinking to a lower figure, then let it be restored by a gentle process to the natural standard, and the cure is effected.

CHRONIC DISEASE OF THE LIVER.  

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To illustrate this has been the principle design of the essay, and as it is frequently a result of the active stage, we were compelled to illustrate its precursor, but it sometimes arises *per se*. The first symptoms which we will illustrate, is hypochondriasis. This condition is well known, and is as universally dreaded. Before we proceed to the treatment, let us inquire, does hypochondriasis depend upon a physical or a mental cause? Because the reply decides the treatment. It depends upon both. In a former part of this treatise allusion has been made to the importance of obtaining the confidence of the patient; in this state it is essential. Here must be brought to play the principle of antagonism; for unless there is set up in the mind a train of thought more powerful than that on which there is a delusion, it is hopeless. A religious writer of distinction, when alluding to the predominance of piety over irreligion in the human mind, attributes it to the power of an "expulsive affection," and this is precisely the condition essential to the cure of hypochondriasis.

The plan of attaining confidence cannot be illustrated, it is the result of observation. I was once summoned from London to attend upon a gentleman of high literary attainments, labouring under this disease. On my entering the house he would not see me, and on hearing that his relatives were urging him to come in, I requested them to desist and leave him to his own inclination. He entered, and then retired immediately, and followed this plan for half an hour. At last, on his staying longer than usual, I ventured to remark the beautiful appearance of the crops. "Ah," said he, "all is well, but wretched me!" I presume, sir, said I, knowing him to be a smoker, "you are in want of your segar." This started a new train of thought, led him away from his painful delusion, and the gloomy hypochondriac, on that evening, was the cheerful companion; and though the condition of his mind is not as yet completely restored, yet the conversation of that evening, the new train of thought set up, was the cause of his improvement. As hypochondriasis depends upon mental and physical causes, the treatment is necessarily two-fold:—1. The principle of antagonism, already alluded to. It matters not whether the brain is the organ of the mind or not, the treatment is precisely the same. Let the first step, then, be to attain confidence. Though connected with hypochondriasis, there is usually hepatic derangement, yet occasionally you meet with cases where every

physical organ is in an apparently healthy condition, and yet there is a depression which is permanent. There may be no delusion, the mental powers may be well balanced, but that sacred fire which lights the whole into action seems going out. There are cases the treatment of which cannot be discussed in books, they are too diversified ; the temperament must be studied, the ruling passions ascertained and worked upon. When it is the man of courage, of high and noble thoughts, awaken his ambition, as the Earl of Oxford is represented by a celebrated novelist lighting up the spirit of Charles the bold, after the destruction of his army by the Swiss. To the man who is celebrated for his riding, speak of another who is doing wonders in the field, whose leaps astonish even the " old ones," and to whom the first jockies must give place, you will strike a chord, you will arouse him to energy and to health. To the lady who has been the object of admiration, speak of the conquests of another. Ascertain the ruling passion and you may work wonders. In the treatment of maladies how the mind is overlooked, its powers unheeded ; in " Richlieu," one of the greatest productions of its talented author, there is a scene which illustrates my meaning. The cardinal is sinking, and apparently dying in the presence of the king, he is deaf to the offers of the seals of office, and the submission of his monarch, and to the triumph over his foes, till the

king says France ; the word, like a charm, brings him to life and energy. To the sportsman, then, talk of the Derby ; to the lady of fashion, of the scenes and circles where she has triumphed ; to the scholar, of the works of the learned ; to the politician talk of the contest of party ; and should the broken soldier cross your path, solicit him to "shoulder his crutch, and show how fields were won." The physical treatment of hypochondriasis is almost as diversified as the moral regimen ; if there be a congested state of the liver, with deficient biliary secretion and confined bowels, let the following medicine be administered :—

Acetic Extract of Colchicum, half a grain to 1 grain.

Aloes, 3 grains.

Blue Pill, 5 grains.

Make into two pills, and take them at bedtime.

The object of these pills is to increase the action of the liver, the formation of bile. Between the administration of these pills and the following draught, there should be at least an interval of three or four hours ; if an aperient draught, immediately follow the pills, their alterative effects are materially interfered with. In three or four hours, let the patient take the following draught :

Sulphate of Magnesia, 1 to 2 drachms.

Diluted Sulphuric Acid, 10 drops.

Tincture of Hyoscyamus, half a drachm.


Infus. Sennæ, half an ounce.

Mint Water, 1 ounce.

Some practitioners may object to the administration of Hyoscyamus, &c., with aperient medicines, &c. ; but the effect is evidently to overcome spasm of the muscular coat of the bowels, and the narcotic tendency is neutralized by the accompanying medicines. Whilst these medicines are operating, there should be a total abstinence from wine, beer, and animal food ; and the effect should be noticed on the head, the complexion, the spirits, the pulse, and the alvine evacuations ; if pain subsides ; if appetite returns ; if sensations of uneasiness are dissipated ; if the alvine, urinary, and cutaneous secretions are carried on with regularity ;—then it may be concluded that the symptoms were the result of a mere partial congestion, and the practitioner may confine himself principally to the moral treatment ; but should there be but a partial relief, should the pain return and the symptoms remain unsubdued, then the disease must come under the treatment of chronic disease of the liver, which will be discussed elsewhere. But supposing, when the bowels have been freely moved and congestion relieved, that there should still remain a debility and depression, which evidently arises from a want of tone. What then is the treatment ? The remedy which I have found the most efficacious is the nitro-muriatic acid, in a state of combination. To commence with vegetable bitters, when there is a tendency to subacute inflammation, is injudicious. It should be recollected that in the stomach there are

formed acids, the presence of which is essential to the completion of digestion; and, therefore, acids are indicated as the simplest, consequently the best, means of restoring the tone of the system. But whilst these acids are administered, let the patient persist in the use of aloes and the acetic extract of colchicum. There is a quality in this preparation of colchicum which is found in no other; it is one of the most valuable medicines in the *Materia Medica*; its specific action is to increase the flow of bile. When this is done, the great object is attained. Nothing can be more dangerous than a suppression of bile; and it is reported, that few cases of cholera had a fatal termination, when the biliary secretion was copiously restored. The acetic extract of colchicum effects this.

## GENERAL TREATMENT OF CHRONIC DISEASE OF THE LIVER.



To illustrate the treatment of disease in all its branches, for the perusal of the public, is a task of difficulty, as it is essential that all readers should have a certain amount of medical knowledge to comprehend it. But suppose an individual in the middle period of life were to present himself for a medical examination, the symptoms presenting themselves leaving no doubt that he had disease of the liver. In the first place, it should be remembered, that few who have laboured under a disease, even for a limited period, hesitate to prescribe for themselves; the usual resort is dram-drinking; the patient then, in ordinary cases, will be found labouring under a species of inflammation. The first thing to be done is to procure a free action of the bowels. There may be, and probably is, offending and irritating matter in the bowels; there may have been a costiveness for months, whilst the fæces have been regularly discharged; and the medical axiom should be borne

in mind, that as there cannot be two diseases at the same time in the system, so there cannot be an increase of natural evacuation without a corresponding diminution of the general irritation. If the patient is a weak and delicate female, it is well to prescribe thus :—

Aloes, 3 to 5 grains,  
Blue Pill, 5 grains,  
Acetic Extract of Colchicum, half a grain.

This should be taken at bed-time, and followed in the morning by a draught, composed of

Sulphate of Magnesia, 2 drams,  
Tincture of Henbane, 1 scruple,  
Decoction of Aloes, half an ounce,  
Mint Water, 1 ounce.

These medicines will seldom fail to clear out the bowels; if there be not acute pain, let your patient rest a day and watch the result. Till this is done nothing should be attempted; no tonic or stimulant. Let it be supposed that there is still pain, great pain, what is called a gnawing pain, the liver being in a high state of congestion, twenty-five leeches should be applied to the region of the liver, pre-supposing that the patient is in a condition to bear the abstraction of blood, administering at bed-time pills or powder as follows :—

Opium, 1 grain,  
Acetic Extract of Colchicum, 1 grain.  
Ipecacuanha, 1 grain,  
Calomel, 5 grains.

But this should not be administered till after the application of the leeches. When leeches or blisters are to be applied, my invariable rule is to give directions thus—let the medicine be taken half an hour after the blister, &c. &c. is applied; this induces many to apply these remedies who otherwise would not; and very often the internal without the external treatment is useless. The evening pill should be followed by a saline aperient draught in the morning, and the probability is, that in the patient there will be a considerable improvement. In the meantime let there be kept up a free action in all the secreting organs; the perspiratory, alvine, and urinary secretions should be increased simultaneously. To attain this, let the following mixture be taken during the day:—

Sulphate of Magnesia, 4 drams,  
Nitrate of Potash, 1 dram,  
Tincture of Ipecacuanha, 2 drams,  
Cinnamon Water, 4 ounces.  
A fourth part every four hours.

Let it be supposed that by this treatment the patient is materially relieved, the pain having subsided, the fever gone down. What then is the treatment? In the first place, abstinence from animal food and wine, and the medicines to be depended upon are colchicum and aloes, keep up a stimulus in the secreting organs, whilst the bowels are in an open state. If the congestion of the

liver has not been entirely removed, a blister may be applied with great propriety. All cases do not demand such active treatment, but there are cases which require them.

Allusion has been made to the action of nitro-muriatic acid, and it may mentioned again. On the cessation of the pain and febrile excitement, it should be immediately administered; whilst the colchicum and aloes hitherto exhibited every evening may be given every second night, but never omit the aperient draught on the subsequent morning. During the febrile stage, the utmost caution should be observed respecting diet: it should be entirely antiphlogistic. For breakfast, the usual beverage of tea may be taken, but neither meat nor eggs; the meal in the middle of the day should be farinaceous; there should be a total avoidance of meat, wine, and beer. The use of diluents is of great importance; nothing tends more to diminish febrile irritation, than a copious flow of urine. In addition to the remedies already specified, allusion may be made to the nitrate of potash, which has invaluable medicinal virtues; it lowers the pulse, and increases the urinary secretion to an extraordinary extent, but it should be assisted by diluents, such as linseed tea, barley water, apple tea; some writers state, that if there be irritation of the kidneys, the nitrate of potash is contra-indicated. If the irritation be excessive, there is truth in the remark, but when accompanied by mucila-

ginous drinks, it is seldom found injurious. The grand secret in producing a powerful and permanent impression on a febrile system is to act on every organ simultaneous. On the skin, heart, and arteries, liver, bowels, kidneys, and urinary secretions, the effect of such treatment is decidedly more efficacious than a violent action on a single organ. The following medicines, when in a state of combination, will have the desired result ;

One grain digitalis, one grain ipecacuanha. one grain acetic extract of colchicum, and five grains calomel, to be made into pills, and taken at bed-time.

Accompanied by the following draught :

Ten or fifteen grains nitrate of potash, half dram tincture of henbane, and cinnamon water.

The following is the rationale of the operation of these medicines: the digitalis, or fox-glove, acts upon the pulse, reducing the action of the heart and arteries, the ipecacuhana upon the skin, producing profuse perspiration. The calomel, with the colchicum, will act upon the bile, the liver, and the bowels; whilst the nitrate of potash will increase the flow of the urine; the henbane removing all spasm, and preventing intestinal irritation. When the pills and draught are taken they should be accompanied by a large quantity of warm diluent fluid, such as gruel, or barley water, and a saline purgative should be administered on the following morning. Suppose, after this treatment, there is

in the invalid a considerable improvement; the febrile symptoms having subsided, the acid producing no irritation. This being the case, to the acid may be added an infusion of some of the tonic barks, such as quassia, gentian, and calumbæ. The effect will be superior to that of quinine. This medicine too frequently produces great irritation, and can seldom be depended upon, on account of its adulteration. The aloes and colchicum may be taken every alternate evening. There should be great caution in diet. It is wrong to deluge an invalid with broths and beef-tea; when animal food is commenced with, let it be in the solid form, such as mutton chop. The invalid may take as a beverage, weak wine and water, claret is best, hock is still better. New bread, butter, fat meats, and salads, are to be avoided. The most favourable results will succeed the use of the shower-bath, if the use is constant. There are remedies, in the grand storehouse of nature, destined to repair the most serious injuries of the human frame, those which are most efficacious, like the waters of Jordan, which healed the leprosy of Naaman, are remarkable for their simplicity.

Use the shower-bath.—“I will commence in April: it is too cold—I shall catch cold—it gives me such a shock, I feel as if I should sink into the earth.” But you will not sink into the earth; that can be no objection. If an invalid wish to prepare his body for the atmospheric

changes, which originate the most serious diseases — if he wish to adopt a plan which is calculated to prevent his sinking into the earth in reality, and prematurely — let him use the shower-bath. This I would especially recommend to those whose labour is principally mental, as the brain is materially affected by study. To authors, to actors, who are engaged throughout the early part of the day in rehearsals, and who night after night inhale the atmosphere of a public theatre, replete with the products of combustion, carbonic acid gas; to clergymen, whose pursuits are sometimes equally laborious; to students; and to all classes of men whose day is spent in confinement and mental labour; the shower-bath is of indescribable value. I cannot compare the exhilarating effects of the shower-bath on the human body to any thing more appropriate, than to that of “the dew on the new-mown grass.”

## DIETETICAL TREATMENT OF CHRONIC DISEASE OF THE LIVER.

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EVERY one who has the slightest knowledge of the organs of digestion, and the consequences of their derangement, must admit the importance of regulating the diet of the invalid.

It has been decided, that during the inflammatory stage of the disease, there should be a total abstinence from animal food, but when this state of irritation has subsided, and the patient is qualified to return to his ordinary food, great caution should be exercised.

The digestive power has been necessarily weakened by disease, therefore those articles should be used which contain the nutritious principle in the greatest degree of purity.

In the first place, the invalid should not eat immediately on his rising from his bed. He ought to prepare the organs by a little gentle exercise. The first meal, when the patient is approaching a convalescent state, should be taken about an hour after rising from bed, and should consist of either tea or coffee, plentifully diluted with milk, and bread and butter; the bread should be stale.

This is sufficient. The organs of digestion are

not loaded by this simple diet, and the meal should be eaten slowly.

For the benefit of the invalid, we will illustrate all the animal substances which are consumed, and recommend him the best.

Beef is very nourishing and digestible, and contains a large quantity of fibrine and osmazone. These principles may be obtained by boiling, and are contained in beef-tea.

Veal is suited to stomachs which are remarkably weak; it contains a great quantity of gelatine, and is extremely easy of digestion.

Mutton is more dense, and contains nourishing qualities; but lamb is much more suited to an invalid, though it contains less nourishment than mutton.

Pork.—This meat is close and difficult of digestion; it is merely suited to robust constitutions, and consequently by the sick should be totally avoided.

Venison is delicate and easy of digestion, and may be eaten by the sick.

The flesh of hare is not well suited for weak stomachs; that of rabbit is preferable.

The domestic birds, as the fowl, the chicken, the turkey, consist of an extra quantity of gelatine, and are remarkably delicate; but the flesh of the duck and the goose should be avoided. Game is not injurious, the quality of the food depends materially upon the manner in which it is cooked.

Roast meats contain more of the principles of ozmazone, which gives the peculiar odour.

Meats when boiled yield a great portion of their nutritive qualities to the water.

Fish is admirably adapted for the invalid; especially the river fish, such as the trout, the perch, the carp, the bream, &c.; the eel must be excepted, it being very difficult of digestion. The cod, the sole, the whiting, and herring may be eaten, but salmon should not be.

Eggs are good when moderately boiled; but cheese is injurious.

Vegetables form part of the sick man's diet, they contain gluten, sugar, resin, salts, &c. The most important vegetable food is bread, which should be well baked and not eaten until it is stale. New bread is bad.

The only vegetables which are unsuited to a delicate stomach are peas, beans, cabbages, and cucumbers, and these should not be eaten. New potatoes are bad.

Fruits are composed of mucilage, sugar, water, malic, acetic, tartaric and oxalic acids. The fruits which may be eaten with impunity are strawberries, raspberries, grapes, pears when very ripe, &c.; whilst the apple, the gooseberry, the currant, the peach, the apricot, the melon, the cherry, and many others, are unsuitable.

When the digestive organs are extremely weak, the patient may commence with a little veal or

chicken. Whilst the liver is in a congested state, or even whilst the curative action is going on, he should avoid beer and wine in its neat state; the best beverage is cold water with a little brandy in it, but the quantity of brandy must be very small. Cold water in many instances will be found injurious, though not in all. The quantity of food taken at the hour of dinner should be very small. The patient, supposing the medicinal remedies acting favourably, may adopt this diet day after day, avoiding the indigestible meats, fruits, and vegetables; and changing from fish to veal, fowl or lamb, according to his inclination; occasionally omitting his meal of animal food, and substituting for it one entirely vegetable.

### ADVICE ON CHANGE OF AIR.

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WHEN an invalid becomes convalescent, the advice of friends is, "Have a change of air:" it is good. The advice is frequently followed, and is sometimes productive of good, sometimes of evil.

The reader will perceive that in this treatise man is not looked upon as a mere physical being, but as one consisting of body and mind; and when speaking of treatment both are taken into consideration.

It should be mentioned as a preliminary, that the invalid must have arrived at a certain stage of convalescence before he ventures on a change of air. He must recollect the contingencies of travelling, the probability of exposure to cold or wet, the certainty of fatigue; if the constitution be not sufficiently rallied for these changes, there is a danger of relapse. Let the patient first be well enough to undertake the journey.

Supposing that the health is partially restored. Is change of air necessary? All changes are good. The agriculturist knows this. Every horsekeeper

and shepherd is aware that a variety of diet and exercise is favourable to the health of the animal.

The little disorders of the young child are often checked by a change of nutriment. Change of air is good, then, because it is a change.

There is a different atmosphere, scenery, diet, and pursuits. All medical men strongly recommend it.

I stated that it is sometimes pernicious as well as beneficial.

Change of air is pernicious, where an invalid, with delicate respiratory organs, with great susceptibility of cold, passes into a damp, humid, cold, or bleak atmosphere. The atmosphere or climate must be investigated. Supposing, for instance, an invalid, who had been suffering from a liver complaint, complicated with an irritability of brain, were, in the month of August, to pass to Brighton or the south of France, it would be injudicious; the brain would probably be injured by temperature. We should choose rather some cooler and more shady spots. Information respecting which he can always obtain from his medical adviser. Again, for a person labouring under a pulmonary affection with a liver complaint, to select a bleak coast would be unwise.

It is impossible to enumerate the places where the invalid may go for a change of scene. So much depends upon the state of his constitution, his temperament, his taste, and his residence.

It is not enough to decide whether the atmosphere, the climate, the diet, are suitable ; it must be ascertained whether the visit will be a source of mental gratification rather than of ennui.

Some will linger from sun-rise to sun-setting by the sea side, inhaling its breezes, contemplating its grandeur, and they will be gratified ; the cares of business are forgotten, the bloom of health is returning, and the mind is happy, because it is placid. Let such go. Though why is the sea side so extolled ? There is equal salubrity in the green vales, the verdant woods of our country districts, and sometimes more. The sea is grand ; but the eye is soon weary of it, and I often think that the variety of rural life would be more interesting than the monotonous grandeur of the ocean.

But there are spirits resembling the sea in their wildness, uncertainty, activity, and power. No scenery, and no air, will compensate for mental inactivity. The beauties of the scene are enjoyed ; but there must be a succession of them, something for the mind to grasp. Such men do not well in remaining at such a spot.

How can a man, whose operations extend throughout the whole globe, or whose eloquence is the bulwark of a nation, if his temperament resemble these, be content to lay by in an insignificant seaport town, picking up shells, or listening to the tinkling of a sheep-bell ? New objects must present themselves ; objects which will employ his

mental powers, and will not jade the mind. Such men should travel.

Many would sink under mental inactivity who have battled against a formidable disease.

A friend of this temperament had been afflicted with a severe illness. He was advised to go to the sea side; he did so, and was sinking under ennui. I advised him to leave Dover, to proceed to Calais, Dunkirk, Brussels, and Antwerp, he did so, travelling night and day. His mind at one time amused by the variety of language and of dress, at another time excited by the reminiscences of a battle-field; anon contemplating with ecstasy the sublime productions of the painter's genius, and at another time listening to the song of mirth in the humble cabaret. Had he remained inactive, his recovery would have been tedious, whereas, in a week he was prepared to return to the duties of an arduous profession.

Thus terminates this treatise: it has been shown that though no vigilance will prevent sometimes the attacks of disease, the health of a man is in his own custody.

But the lamp of life must one day be extinguished, and if the author of this simple treatise is enabled to prolong its light, whether it burn in the chamber of luxury or in the cabin of privation, his ambition has reached its highest point of attainment, whilst the action will be attended with its own reward.

THE END.

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